

REMARKS

5       Claims 13-16, 18, and 34 have been amended. Claims 1-12, and 20-33 have been cancelled without prejudice as having been drawn to non-elected inventions. Claims 13-19 and 34 remain in the application. Further examination and reconsideration of the application, as amended, is hereby requested.

Claim Status:

10       In Section 4 of the Office Action, claims 13-19 and 34 stand rejected under 35 USC 102(e) as being anticipated by Martin et al. (2004/0218341A1) hereinafter "Martin". Applicants have amended their claims to more clearly define and distinguish their invention over Martin. Accordingly, Applicants respectfully traverse this rejection for the claims, as amended. The claim language of the 15 instant application, as amended, is not disclosed, taught, or suggested by Martin. The Applicants would also believe that the instant claimed invention, as amended, would not be obvious over Martin. The Martin publication and the instant application are assigned to the same assignee, Hewlett Packard Development Co., LLC. Accordingly, as Martin is cited as a 35 USC 102(e) reference, and the 20 combination of Martin with another reference or the use of Martin alone as a 35 USC 103(a) rejection would be improper under 35 USC 103(c).

Claim language not disclosed, taught or suggested by Martin

25       The standard for *prima facie* anticipation under 35 USC 102 is that "[t]here must be *no difference* between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." (Scripps Clinic & Research Found. v. Genentech, Inc., 18 USPQ2d 1001, 1010 (Fed. Cir. 1991)) That is, the prior art reference must disclose each element of 30 the claimed invention "*arranged as in the claim*" in question. (Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984)). The subject matter of claim 13, as amended, reads:

13. A method of controlling a gap between at least one fixed plate and an electrostatically movable plate in a MEMs device, comprising:

5 time modulating a control signal *to a controlled current output that is variable voltage compliant* to represent a desired gap between the fixed plate and the electrostatically movable plate;

10 selectively routing a charge *which is a function of the controlled current output and the modulated time* to array elements each including control circuitry and one of the plurality of electro-mechanical devices; and

displacing the electrostatically movable plate in response to the controlled current output.

Fig.3 of Martin discloses a reference voltage  $V_{ref}$  (hence not a

15 variable voltage compliant controlled current output as Applicants are claiming) and a control switch 91 to control the gap of MEMs 34 by controlling the time the  $V_{ref}$  voltage is applied to plate 42. As charge is accumulated on plate 42, a voltage develops between plate 42 and plate 44 leading to a reduction in current over time as the  $V_{ref}$  voltage is applied.

20 Thus, the charge routed is a function of the modulated time, the applied  $V_{ref}$  and the geometry and dielectric constants of the MEMs device and thus the charge routed is not a function of the controlled current output and the modulated time as claimed. By using a controlled current output that is variable voltage compliant, Applicants are able to compensate for the

25 reverse charge buildup on the MEMs device to ensure a precise amount of charge is delivered to the MEMs device. Accordingly, one of ordinary skill would be aware of the difference between a fixed voltage reference and a variable voltage compliant controlled current output source. Martin does not disclose, teach, or suggest each and every element as arranged by the

30 Applicants claim 13, as amended.

Claim 34 has been similarly amended and thus is also believed not anticipated by Martin.

35 Claims 14-19 depend from claim 13 and are believed patentable based at least on the patentability of claim 13 as amended. Various dependent claims have been amended to correct antecedent basis by depending now from the proper parent claims.

Withdrawal of the rejection under 35 USC 102(e) and allowance of claims 13-19 and 34 is respectfully requested.

Additional notes with respect to patentability of the claims

35 USC 103(c) (1) states that "Subject matter developed by another person, which qualifies as prior art only under one or more of subsections 5 (e), (f), and (g) of **section 102** of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person." As noted previously, both Martin and the instant Application are commonly assigned 10 to Hewlett Packard Development Co., LLC and thus it would improper to assert Martin as part of an obviousness rejection. In fact, the instant claims are inventive over Martin as it is the inventor's insight that using a timed current controller with a variable voltage compliant current source rather than a timed fixed voltage reference source the charge on the MEMs plates 15 can be more precisely controlled to allow for further plate travel before the "pull-in" effect can occur.

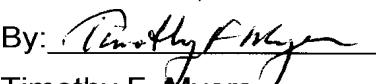
Further, when a prior U.S. patent is not a statutory bar, a 35 U.S.C. 20 102(e) rejection can be overcome by antedating the filing date (see MPEP § 2136.03 regarding critical reference date of a U.S. patent) of the U.S. patent reference by submitting an affidavit or declaration under 37 CFR 1.131 or by submitting an affidavit or declaration under 37 CFR 1.132 establishing that the relevant disclosure is applicant's own work. (MPEP2136.05). However, since the claims have been amended to 25 distinguish Applicants' invention over Martin, nor would it be a valid 103(a) reference under 103(c), Applicants do not believe it is necessary to antedate the Martin reference. However, Applicants reserve the right to submit a 37 CFR 131 or 132 declaration if the Examiner continues to assert Martin.

Applicants believe their claims as amended are patentable over the art of record, and that the amendments made herein are within the scope of a search properly conducted under the provisions of MPEP 904.02. Accordingly, claims 13-19 and 34 are deemed to be in condition for allowance, and such allowance is respectfully requested.

If for any reason the Examiner finds the Application other than in a condition for allowance, the Examiner is respectfully requested to call Applicants' undersigned representative at the number listed below to discuss the steps necessary for placing the application in condition for allowance.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-2025. Should such fees be associated with an extension of time, Applicants respectfully request that this paper be considered a petition therefore.

Hewlett-Packard Company  
Legal Department  
1000 NE Circle Blvd.  
Corvallis, OR 97330  
Telephone: (541)715-4197  
Fax: (541)715-8581

Respectfully Submitted,  
Eric T. Martin, et al.  
By:   
Timothy F. Myers  
Patent Attorney  
Registration No. 42,919